



Transferable Development Rights

Transferable Development Rights

- Land-owner retains all rights to property, except development rights.
- Home-owners in climate change vulnerable areas can remain in their homes.
- Property value lost through climate vulnerability (for example, increasingly flood prone areas) is recovered through sale of development rights.

Transferable Development Rights (TDR) are a regulatory technique allowing development rights to a property to be severed, transferred, and relocated to another parcel of land. The landowner retains the title and other rights to the property and may sell or exchange the land title or development rights separately. The development rights are expressed as a conservation easement recorded in the land records. TDR programs can advance land use management goals of a municipality without causing a financial burden to landowners or restricting needed development. These programs have traditionally been designed to preserve and protect natural or historic resources for the benefit of the public but could be used to promote climate resilience by limiting development in areas of higher climate risk and encouraging development in less sensitive areas.

TDR programs preserve a landowners' assets by shifting the right to build in area where increased development would be detrimental to an area where development is encouraged. Creating transferable development rights avoids legal issues with constitutional "takings" that could arise from restrictive re-zoning prohibiting development outright. The protected zone, or *Sending Zone*, directs the rights to development out of the area. *Receiving Zones* then allow for use of development rights from the sending zone permitting more density than authorized by local zoning ordinance.

TDR programs are advantageous because they can create a win-win situation for landowners and regulators. Permanent protection from further development is granted to the property within a sending zone, and the property owner is financially compensated without major public expenditure.

TDRs as a Tool for Municipal Climate Resilience

TDRs have the potential to shift development away from vulnerable areas like shorelines and towards preferred inland areas. Currently, TDRs are mainly used nationally by municipalities for agricultural or open space preservation. However, several municipalities across the nation are evaluating TDRs as a climate resilience strategy. Governments can create disincentives for new development in vulnerable coastal areas, while using TDRs to increase inland density. For example, coastal communities can use TDR programs to retreat from the shoreline by designating parcels along the coast as sending zones, limiting development, and incentivizing development elsewhere.



While usually used to protect environmentally or culturally sensitive areas from development pressure, *TDR programs can address climate-intensified hazards such as:*

- Flood and sea level rise
- Soil Hazards
- Wildfire
- Erosion
- Landslides
- Poor Water Quality

Benefits of TDR Programs

- Preserve environmentally sensitive areas from becoming impaired or to protect a critical ecosystem service
- Reduce development in hazardous areas without expenditures of tax dollars
- Give developers and landowners more flexibility than under strict zoning
- Potential to compensate landowners for downzoning or other restrictions on their land
- Accommodate growth and still preserve land from development
- Selling development rights is voluntary; developers purchase density bonuses and costs are not handed down to homebuyers
- Economic, environmental and health benefits received by the public:
 - Reduced development in flood prone areas
 - Cleaner drinking water (protection of public water supply)
 - More diverse and affordable housing options with higher-density development

Establishing TDR Programs in Connecticut

Nationally, TDR programs can be implemented by state, regional, local planning agencies or legislative bodies. In Connecticut, C.G.S. § 8-2 enables municipal zoning authorities to implement TDR ordinances. However, C.G.S. § 8-2(f) establishes development rights can only be directly transferred between a seller and purchaser upon joint application; there is no provision allowing a third party to hold or bank rights until a suitable purchaser is found. This makes the transfer of development rights in Connecticut challenging. The Connecticut State Legislature may consider revisiting this policy to increase its utility. Current Connecticut law (C.G.S. § 8-2e) does allow for development rights to be transferred across municipal boundaries, if enabled by the participating municipalities' legislative bodies. Working together, two or more municipalities could design a TDR program for mutual benefit. Potential multi-town approaches could be coordinated by a supra-organization or land trusts, a council of governments, or the Connecticut Green Bank.

Challenges to Creating TDR Programs for Climate Resilience

There must be significant investment to educate property owners in the sending area of the value of transferable development rights. Without adequate explanation, property owners can be cautious about participating in TDR programs for worry that future buyers will be hesitant to purchase property with recorded easements, or because the sending zone is identified as a climate vulnerable area, which could impact property values. Municipalities should be aware of these concerns when designing the program. Programs may also consider the anticipated timeline and magnitude for a specific climate-related hazard.

Areas vulnerable to climate hazards, especially coastal areas, are attractive places to live and work, and significant financial investments for owners. TDR programs can be an opportunity for landowners to recoup value and residential development potential lost to climate risk while promoting municipal resilience.

Municipalities Developing a TDR Program for Climate Resilience Should:

- **Determine the goal of the program.** What risks will the program reduce? What development goals will be met? For example, does the TDR program reduce further development in a flood prone area and increase development density in an area with good transportation infrastructure?
- **Define the area for Sending and Receiving Zones.** Carefully delineate the areas where the program will apply by assessing vulnerabilities. Both areas could be broadly or narrowly based on geography, design criteria, or risk assessment.
- **Determine value of the rights to be transferred.** A successful program will depend on careful balancing of market forces, including other concurrent incentive programs, and local development needs. The program should benefit both seller and buyers and lead to a safer, more resilient community.
- **Create procedures to manage the program.** Because Connecticut only allows direct transfer, municipalities will need to establish procedures for documenting and recording the transactions, and how incentives can be utilized. Data on transactions will be crucial for determining the success of the program.
- **Meet with stakeholders.** A successful program is transparent to the property owners affected. The municipality should offer multiple opportunities for public education and feedback and proceed with the support of the community.
- **Adopt the ordinance.** The specific TDR ordinance adopted for climate resilience will be similar to those established for other purposes in the state (land/cultural resource protection) but tailored to the program goals, specifying sending and receiving zones, and how the units of the development right are calculated.

Connecticut TDR Statutes

C.G.S. Sec. 8-2 Regulations (a)...Such regulations may provide for a municipal system for the creation of development rights and the permanent transfer of such development rights, which may include a system for the variance of density limits in connection with any such transfer....

C.G.S. Sec. 8-2e. Municipal agreements regarding development rights. Any two or more municipalities which have adopted the provisions of this chapter or chapter 125a or which are exercising zoning power pursuant to any special act may, with the approval of the legislative body of each municipality, execute an agreement providing for a system of development rights and the transfer of development rights across the boundaries of the municipalities which are parties to the agreement. Such system shall be implemented in a manner approved by the legislative body of each municipality and by the commission or other body which adopts zoning regulations of each municipality.

C.G.S. Sec. 8-2f. Joint applications necessary for transfer of development rights. Any zoning regulations adopted pursuant to section 8-2 concerning development rights shall authorize the transfer of the development rights to land only upon joint application of the transferor and transferee.

Applied TDR Programs

While not specifically designed for climate resilience, TDR programs that protect natural areas could aid in protecting or establishing natural buffers to reduce flooding, protect water supply, or mitigate ground level heating. Listed below are example TDR programs in use in Connecticut and throughout the country. To read more about these examples, see the "For More Information" and "References" sections below.

Small towns, using TDR for specific conservation purposes:

Madison, Georgia

In 2014, to further a municipal micro-planning project, the town of Madison adopted a TDR ordinance designed to protect small areas of vital natural habitat, riparian and wildlife corridors, and urban greenspace. The city initially launched a pilot program that protected 25 acres. The TDR's generated were purchased by a developer and allowed for the construction of an additional 32 units in a Leadership in Energy and Environmental Design (LEED) certified affordable housing complex adjacent to transit. This type of micro application of TDRs would be a good model for Connecticut's smaller towns seeking ways to accomplish specific conservation and development goals.

Mequon, Wisconsin

The city of Mequon has created a TDR program for the purpose of protecting a nature preserve from neighboring development. A developer purchased the development rights to a 112-acre parcel that prohibits development through a conservation easement. The development rights were transferred by allowing increased density on a property north of the preserve that is owned by the developer.

Avon, Connecticut

The town of Avon uses a TDR program to preserve valuable natural resources and open space while directing development to more appropriate locations. The formula to the right from the Avon zoning code is used to calculate how density should be transferred.



Avon zoning map. Sending zone hatched.

	[(A)]	+	(B)]	x4	=	(C)
	Total # of acres of parcel in the receiving area after application of the Developable Land Calculation	+	Total # of acres of parcel in the sending area after application of the Developable Land Calculation	x4 =	=	The maximum # of units which may be constructed in the receiving area*
* The maximum # of units which may be transferred from the sending area to the receiving area shall be limited such that the maximum density on the parcel to be developed (sending area) does not exceed 8 units per acre after application of the Developable Land Calculation.						
The following is an example of how the transfer of density may be accomplished:						
(A)	Transfer In Parcel = (Receiving Area)		13 acres in total 2 acres of wetland soils 2 acres of steep slopes 1 acre of flood plain			
			8 Acres Total after Application of Developable Land Calculation			
(B)	Transfer Out Parcel = (Sending Area)		12 acres total 1 acre of wetland soils 1 acre of steep slopes 0 acres of flood plain			
			10 Acres Total after Application of Developable Land Calculation			
Number of units after density transfer:						
	[(13-5) + (12-2)]		x 4 = C			
	(8 + 10)		x 4 = C			
	18		x 4 = 72			

Larger scale TDR examples

Montgomery County, Maryland

Montgomery County enacted a TDR program to address rising housing demands after World War II. County Officials sought to protect the open space and farmland that sustained the entire region by limiting the development on a 93,000-acre reserve to one house per 25 acres. This allowed development rights to be transferred to developers in other parts of the county.

Miami-Dade County, Florida

Miami Dade County Office of Resilience undertook a study in 2017 to assess the value of TDRs as part of a climate adaptation strategy. Florida passed the Community Planning Act in 2011 which allows local governments to designate an Adaption Action Area to focus adaptation planning and funding to a specific location impacted by coastal hazards and sea level rise. The study found that a carefully structured program responsive to market forces could be a useful tool to incentivize managed retreat from hazardous areas. The report also recommended forming a TDR bank to allow for more flexibility. Presently, Miami Dade County has not implemented a TDR program focused on climate resilience, in part because there remain many development incentives from other programs in the market. Because the market forces are not well balanced, transferred development rights have little value at this time. However, the Office of Resilience still hopes to use a TDR program as a climate resilience tool in the future.

Connecticut specific modification of TDR concept

Stamford, CT

The city of Stamford, CT adopted a modified TDR program to manage development densities and encourage historic preservation. Instead of traditional sending and receiving areas, the ordinance allows for redefining boundaries of adjacent lots for zoning purposes in a few of the city's densest zoning districts. Adjacent lots can be redefined as larger "zoning lots" and the development rights of one "tax lot" (traditional property boundaries) can be shifted to an adjacent "tax lot" within the greater "zoning lot". This creates a financial incentive to protect historic property by giving owners the ability to sell or use the development rights in an adjacent property. The development rights can then be used for increased density beyond that allowed by the base zoning code. Development must still meet parking and setback requirements and height limitations.

Stamford's novel use of TDR works within state law by providing for direct transfer of TDR between seller and purchaser. Without the ability to "bank" TDR credits, TDR programs can be limited in Connecticut. This application could be applied to promoting climate resilience in areas where protection of micro-resources would be of value, like shade islands, greenspace, or creating stormwater retention swales.

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More information

A report from Maryland Department of Planning on TDRs with study findings and recommendations of incentive examples and next steps on how to enact TDRs:

<https://planning.maryland.gov/Documents/OurWork/envr-planning/TDR-committee-report-2016.pdf>

A study by Miami-Dade County FL exploring TDR programs as a climate adaptation strategy:

https://seflorida.uli.org/wpcontent/uploads/sites/13/2018/06/ULI_TDR_Focus_Group_Report-1.pdf

TDR Programs in Managed Retreat Context and Legal Considerations:

[https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/transfer-of-development-rights.html#:~:text=Transfer%20of%20Development%20Rights%20\(TDR,called%20%E2%80%9Creceiving%20areas%E2%80%9D\)](https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/transfer-of-development-rights.html#:~:text=Transfer%20of%20Development%20Rights%20(TDR,called%20%E2%80%9Creceiving%20areas%E2%80%9D))

Center for Land Use Education, University of Wisconsin TDR Factsheet:

https://www3.uwsp.edu/cnr/ap/clue/Documents/PlanImplementation/Transfer_of_Development_Rights.pdf

Stamford CT TDR Ordinance and news article:

<https://www.stamfordct.gov/home/showpublisheddocument/2401/637697344469730000>

Article discussing new TDR program in Stamford:

<https://www.stamfordadvocate.com/local/article/Air-rights-Here-s-what-transferable-16227134.php>

Analysis of Madison GA micro-planning using TDR:

<https://www.madisonga.com/DocumentCenter/View/972/TDR-Program-Summary?bidId=>

Avon CT Zoning Regulations for TDR:

https://s30428.pcdn.co/wp-content/uploads/sites/2/2019/09/Avon_-_Zoning_Regulations_Excerpt_1.pdf

References

- Avon, CT: Local TDR Enabling Ordinance, FIC, <https://farmlandinfo.org/law/avon-ct-local-tdr-enabling-ordinance/> (last visited Oct 25, 2022).
- Evangeline Linkous, Lucie Laurian & Stephen Neely, *Why do counties adopt transfer of development rights programs?*, 62 JOURNAL OF ENVIRONMENTAL PLANNING AND MANAGEMENT 2352 (2019), <https://doi.org/10.1080/09640568.2018.1559044>.
- Planning Implementation Tools Transfer of Development Rights, CENTER FOR LAND USE EDUCATION (2005), Retrieved June 12, 2022, from https://www3.uwsp.edu/cnr/ap/clue/Documents/PlanImplementation/Transfer_of_Development_Rights.pdf
- Rick Pruetz, *Climate Action and Transferable Development Rights*, (2020), 37 ZONING PRACTICE 8. Strengthening Incentives: Transfer of Development Rights (TDRs). PLANNING FOR HAZARDS: LAND USE SOLUTIONS FOR COLORADO, <https://planningforhazards.org/sites/planningforhazards.com/files/media/PFH-TDRs.pdf>
- Transfer of development rights Fact Sheet, CRCOG (2002), https://crcog.org/wp-content/uploads/2016/07/Ch03_FactSheet_TDR.pdf
- What Is a Transfer of Development Rights (TDR) Program?, RUTGERS, NEW JERSEY AGRICULTURE EXPERIMENT STATION, <https://njaes.rutgers.edu/highlands/transfer-development-rights.php>

For more information about Resilient Zoning practices, contact:

Louanne Cooley
Louanne.Cooley@uconn.edu

Louanne Cooley and Kayla Vargas, CIRCA Legal Research Technician, authors

To learn more about CIRCA, visit circa.uconn.edu and the Resilient Connecticut project for more climate resilience planning tools: resilientconnecticut.uconn.edu

University of Connecticut
Avery Point Campus
1080 Shennecossett Road
Groton, CT 06340

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